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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,446	03/08/2002	Satoru Tanaka	220449US2	8748

22850 7590 12/19/2003

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1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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CHAUHAN, ULKA J

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/092,446

Applicant(s)

TANAKA, SATORU

Examiner

Ulka J. Chauhan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. **Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art [0004-0008] (APA) and U. S. Patent Application Publication 2003/0194129 to Metz et al.**

4. As per claims 1 and 2, APA discloses an image processing apparatus comprising a memory for storing drawing data connected to a print engine via an ASIC that is connected to AGP [0004], and a print engine ("***a print engine***") coupled to the ASIC via a PCI bus [Fig. 1] ("***an interface unit between a graphics port and a peripheral device interconnection port***"). APA further discloses that the CPU ("***a processing unit***") supplies drawing data to be stored in the local memory ("***a second memory connected to the interface unit***") and the memory for

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drawing [0004 and Fig. 1] (“*the processing unit stores the image data in the first memory*”).

Therefore, APA discloses that CPU supplies drawing data to the memory for drawing that is coupled to the print engine through the AGP and the ASIC. And APA discloses that the print engine 1610 becomes the master of the PCI bus to read image data stored in the memory for drawing [0008] (“*transfers the image data stored in the first memory to the print engine directly through the graphics port, the interface unit and the peripheral device interconnection port*”). APA does not expressly teach that the memory for drawing is *provided on the side of the processing unit with respect to the graphics port*. Metz teaches a digital reprographics system 10 comprising a CPU 12, and imaging engine 30, a system memory 22, and a printer 35 [Fig. 1], where the imaging engine stores processed data in the system memory [0014]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of APA and Metz whereby the memory for drawing disclosed by the APA is implemented as the system memory taught by Metz. One would have been motivated to do this so that the CPU has easy access to the desired data for additional processing.

5. Claims 7 and 8 are similar in scope to claims 1 and 2, and are rejected under the same rationale.

6. **Claims 3-6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art [0004-0008] (APA) and U. S. Patent Application Publication 2003/0194129 to Metz et al and U.S. Patent No. 6,370,631 to Dye.**

7. As per claims 3-6, APA discloses that the ASIC generally has a compression function and a data transfer function [0004] (“*a compressor connected between the graphics port and the second memory*”). APA does not expressly teach a decompressor connected so that

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decompressed data is stored in the second memory or connected so that decompressed data is transferred from the first memory or the second memory. Dye teaches an integrated memory controller, IMC 140, comprising compression logic 302 and decompression logic 304, whereby the two logic function to store compressed or decompressed data to the system memory and to transfer compressed or decompressed data read out from the system memory [Figs. 7-15]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined teachings of the APA, Metz, and Dye whereby a decompression logic as taught by Dye is incorporated in the ASIC along with the compression function typically included in the ASIC. One would have been motivated to make such a modification so that decompressed data can be stored in the local memory disclosed by the APA or transferred to the print engine, as desired and as necessitated by data size and storage capacities of the memories.

8. Claims 7-12 are similar in scope to claims 1-6, and are rejected under the same rationale.

### *Conclusion*

9. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6337746 to Coyle et al.      U.S. Patent No. 6208273 to Dye et al.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ulka Chauhan** whose telephone number is (703) 305-9651. The examiner can normally be reached Mon.-Fri. from 9:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matthew Bella**, can be reached at (703) 308-6829.

**Any response to this action should be mailed to:**

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Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to:

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, Sixth Floor (Receptionist).

11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 305-4700.



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Ulka J. Chauhan  
Primary Examiner  
Art Unit 2676

ujc  
December 15, 2003